NDCEE

National Defense Center for Environmental Excellence

DoD Executive Agent
Office of the Assistant Secretary of the Army (Installations and Environment)

Addressing Buildings and Numbering Interior Areas ~ Tobyhanna Army Depot 2007

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TOBYHANNA ARMY DEPOT

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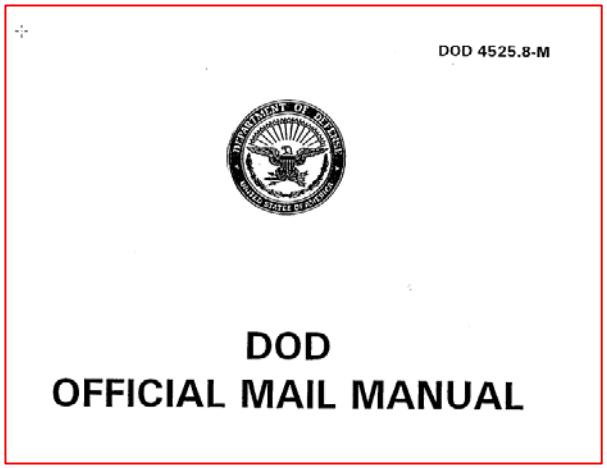
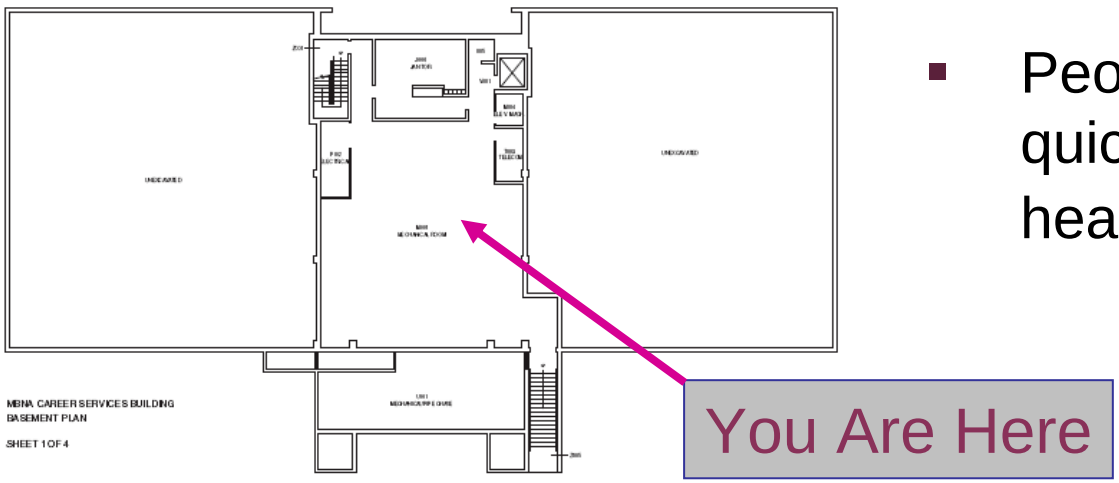
Why Re-Address?



- **D0D 4525-8 states** that installations shall not have one address and then building numbers, such as "44 Hap Arnold Blvd, Bldg 678," but rather 44 7th Street, Tobyhanna, PA, 18466
- Follow USPS Street address standards.

Why Number Rooms?

- The old numbers have worn off
- People are tired of saying: “Up where the old drafting area used to be, over behind the ATM”



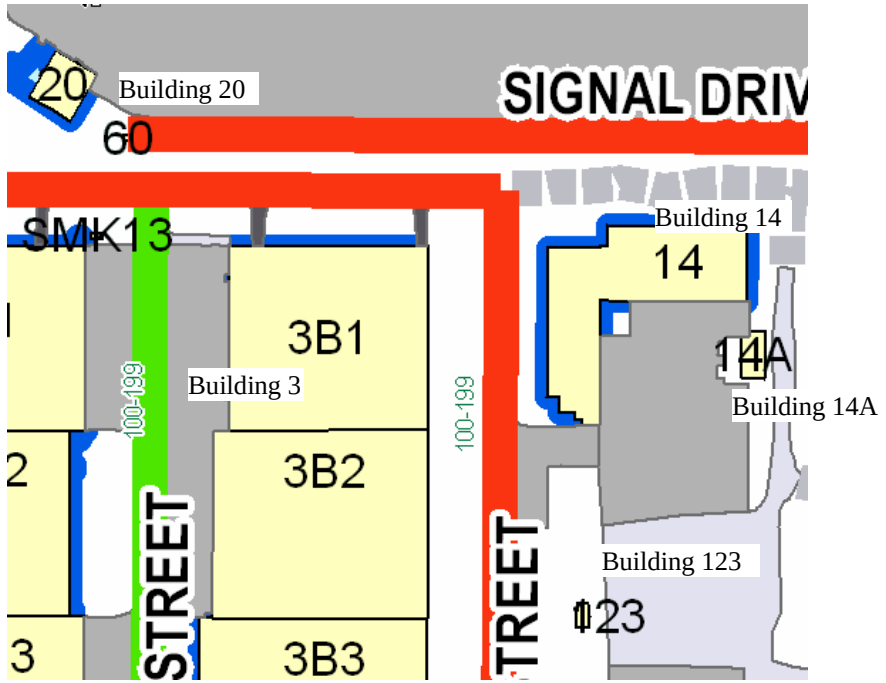
- People like to be found quickly when they have heart attacks.

What are some of the challenges on an old installation?

- Old drawings
- No drawings
- Inaccurate drawings
- Conflicting drawings
- Standard Operating Procedures do not address current requirements
- Lack of cooperation between divisions.

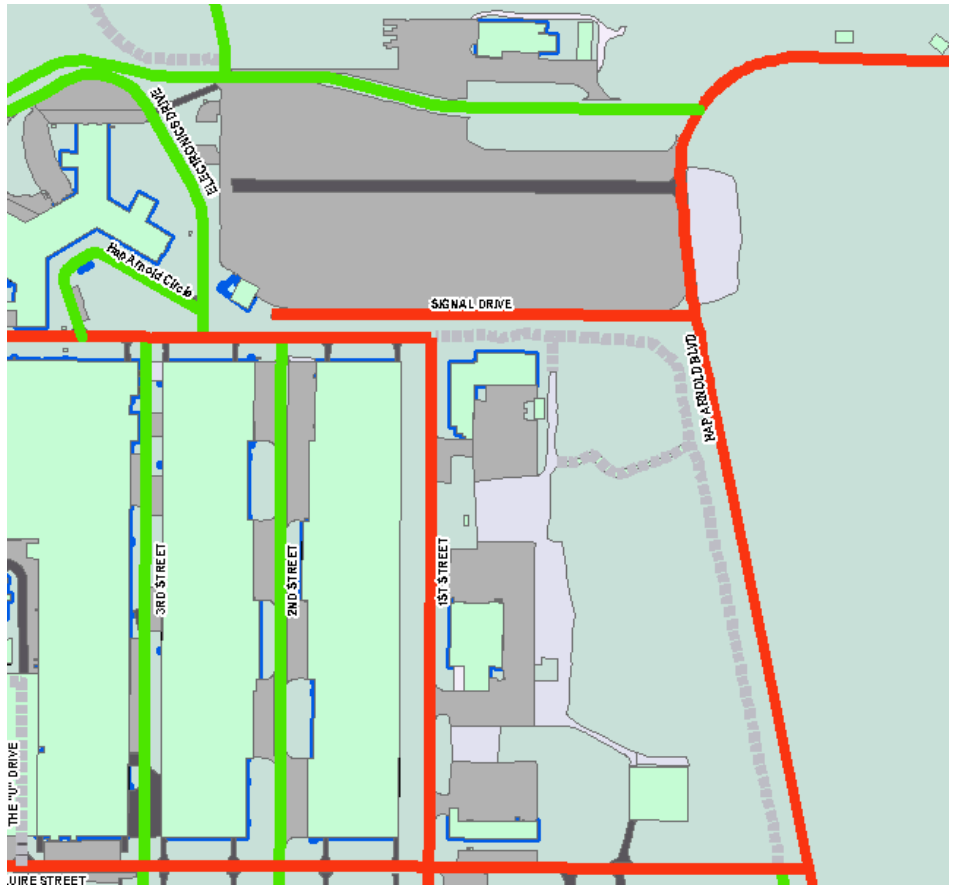
Addressing vs. Building Numbers

- Building numbers were assigned randomly
- Only the master planner knew for sure
- Moving around the depot became difficult and incomprehensible (numbers made no sense).



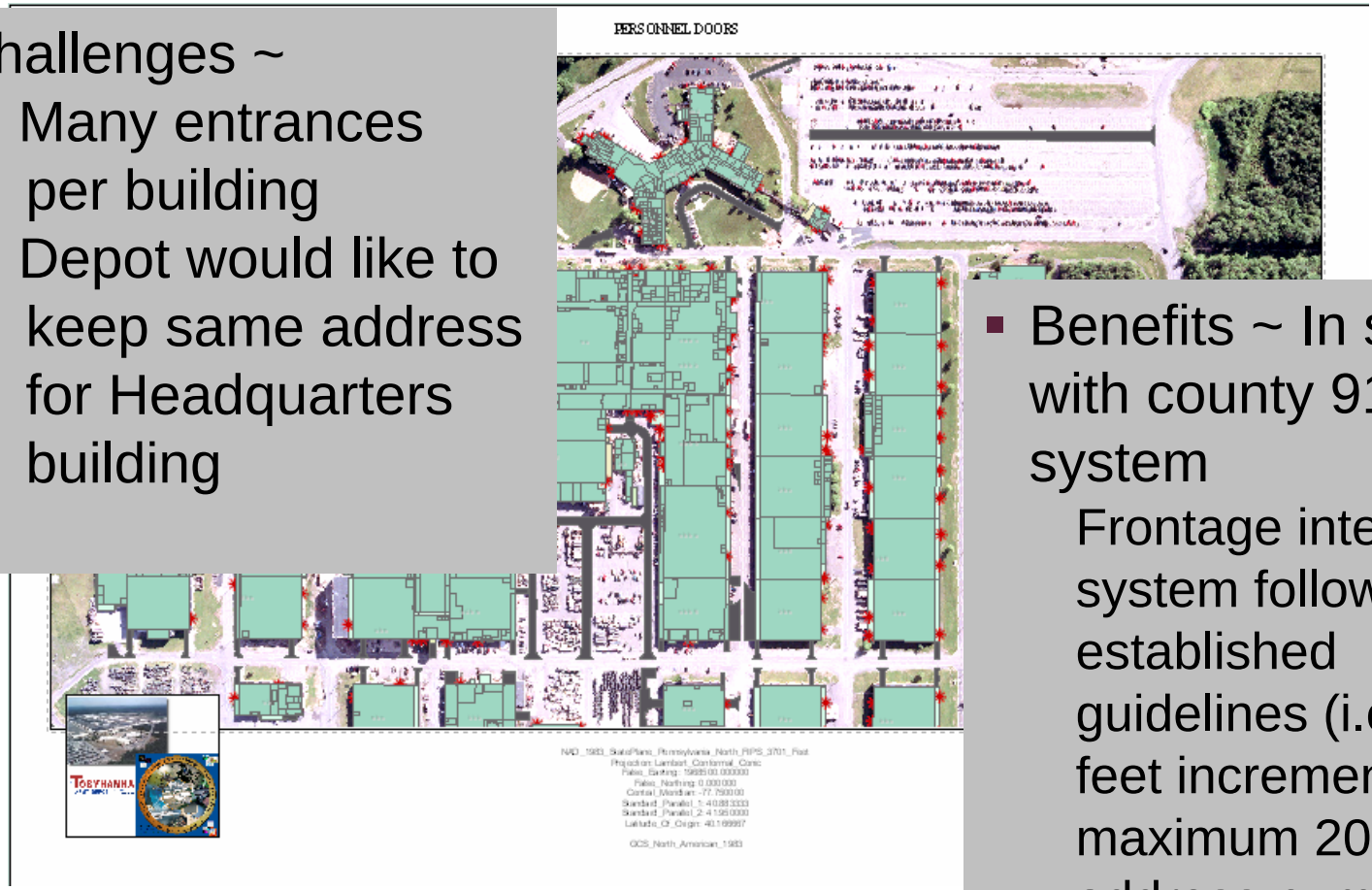
Some of the Challenges with Addressing

- Road naming
- Roads cannot go in two directions
- Road names cannot be duplicated within a township
- Streets must be named according to names and functions associated with the Depot.



New Address System by Street Number

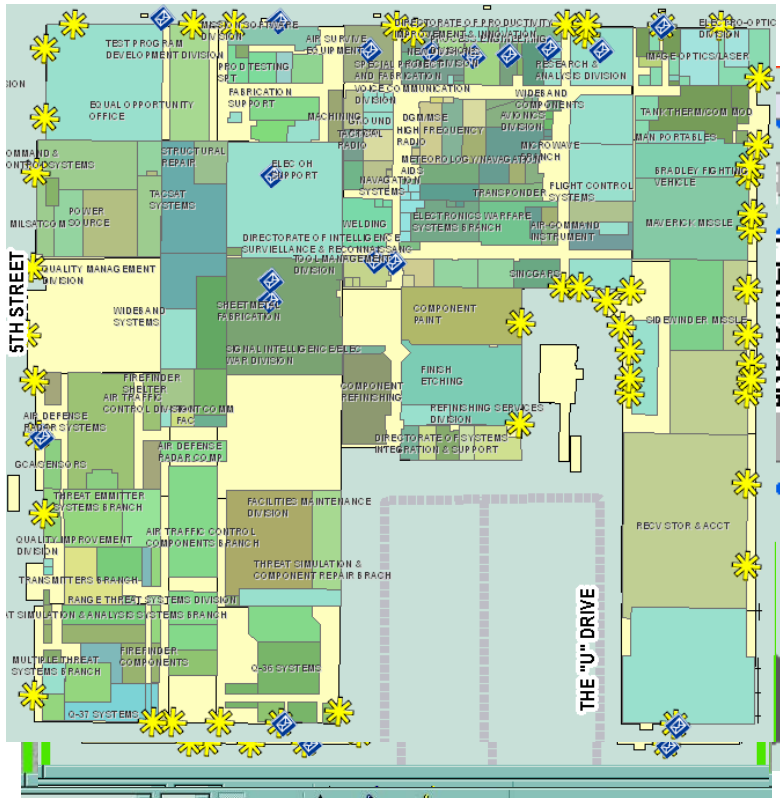
- Challenges ~
  - Many entrances per building
  - Depot would like to keep same address for Headquarters building



- Benefits ~ In sync with county 911 system
  - Frontage interval system follows established guidelines (i.e., 52.8 feet increment yields maximum 200 address numbers per mile).

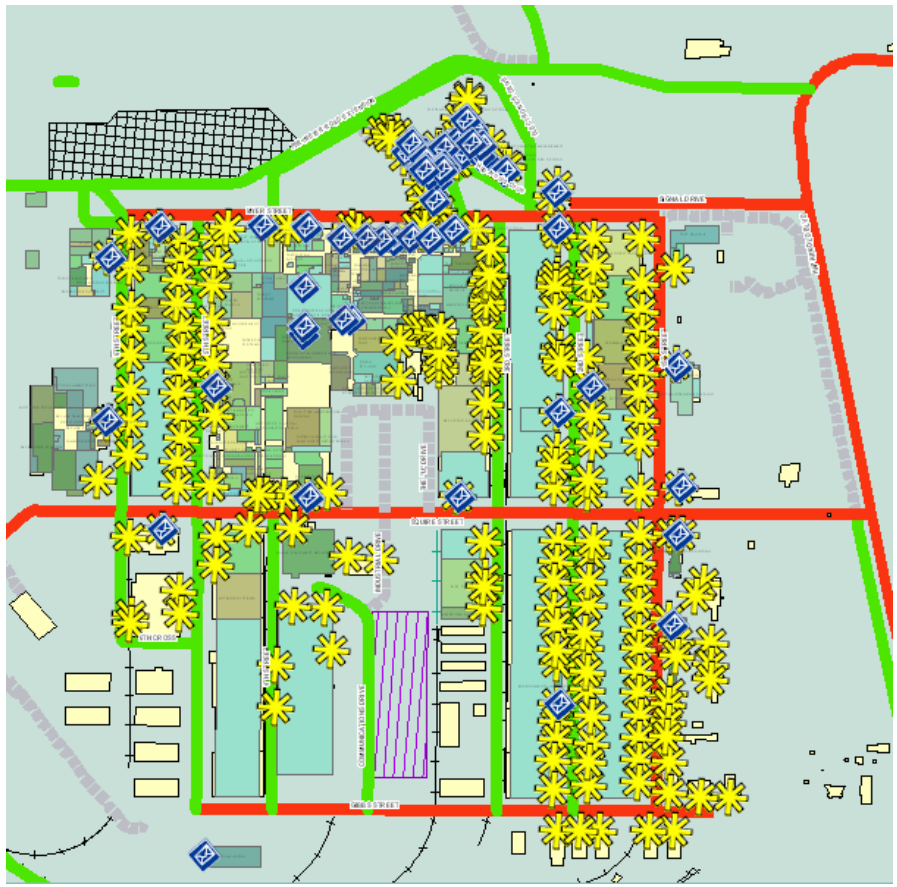
Some of the Challenges with Tobyhanna Depot

- Many entrances per building
- Many mail stops per building
- Many cost centers per building.



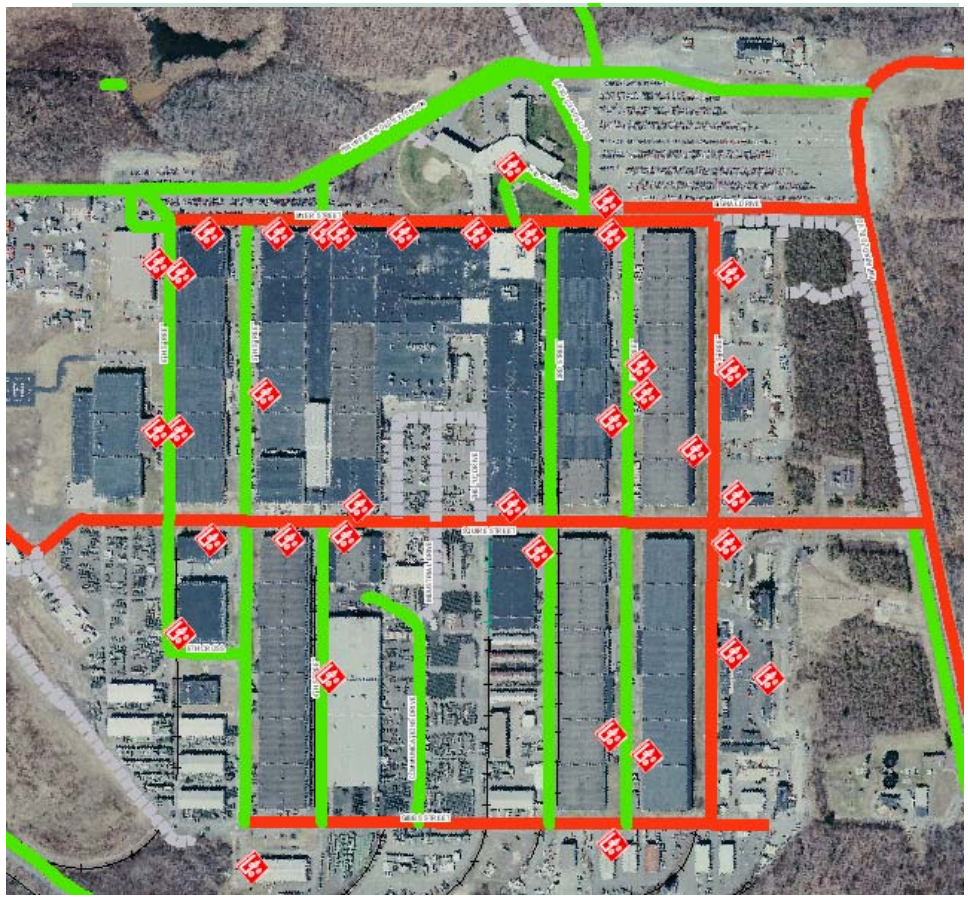
Entrances per Building

- Became a large issue with cost centers, tenants, and directorates
- Usually addressing involves one address per building
- Mail stop locations became primary.



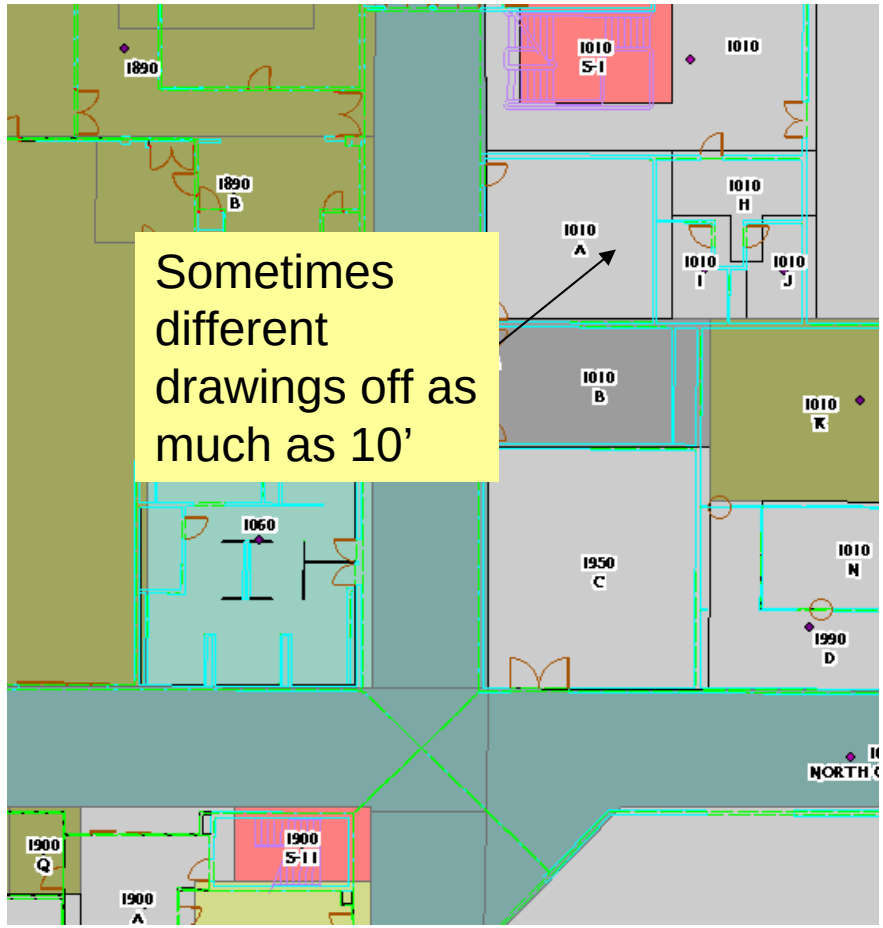
Entrances per Building

- Find all entrances to building
- Locate all mail stops
- Locate primary personnel door
- Place address label at primary entrance.



Interior Addressing Information and Attributes

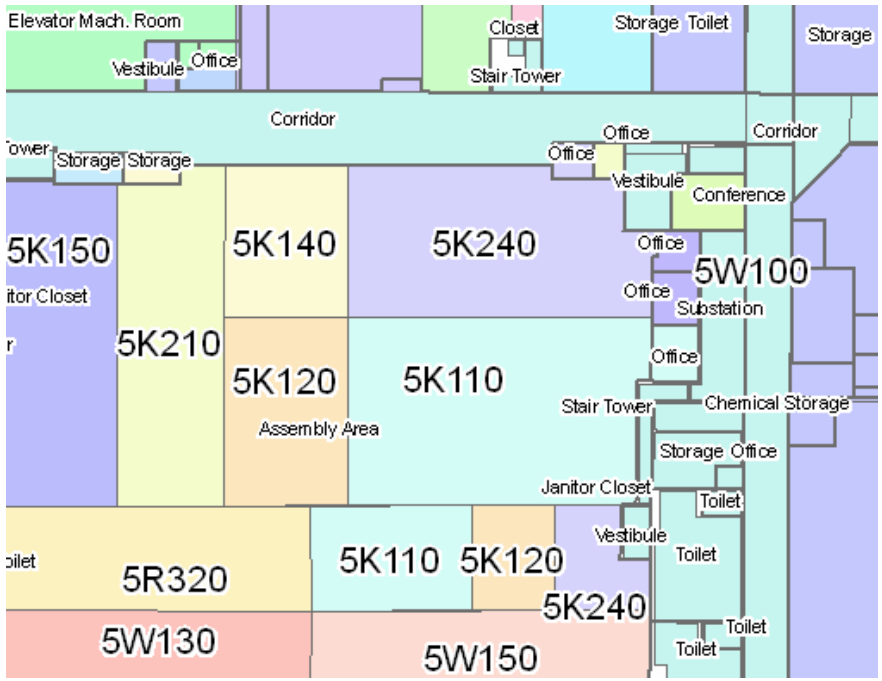
- How accurate are your areas?
- Is it easier to bring in AutoCAD® interiors and georeference them, or to create new polygon features?
- Technical challenges with copying data from one source (inaccurate polys/accurate data) to another (accurate CAD or polys/null data).



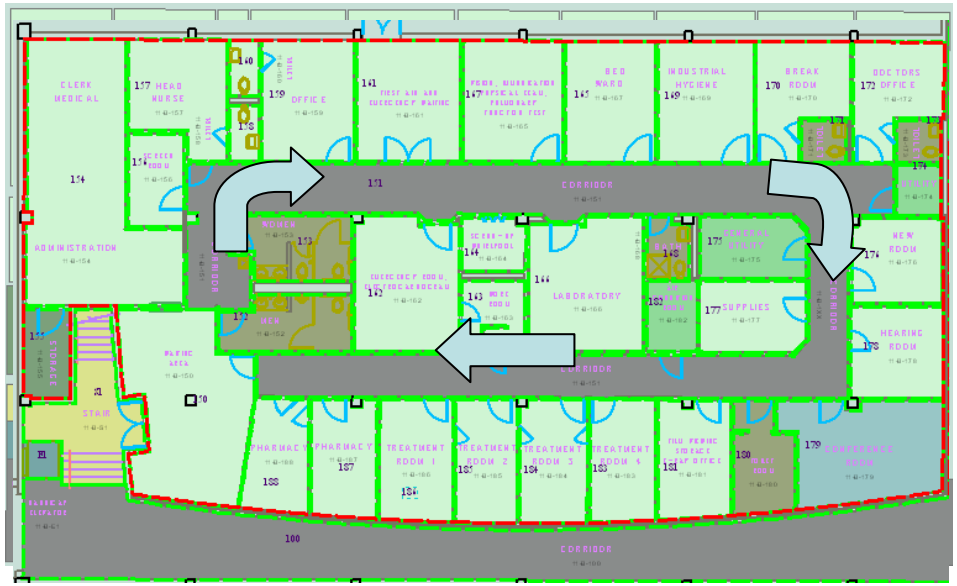
Room Data to be Collected

- 1st iteration
  - Cost center, division, and office
  - Use
  - CatCode

- 2nd iteration (while correcting CAD data)
  - Ceiling height
  - Door swing, type, size
  - Floor type.



Room Numbering Considerations



Consistency

- Between buildings on the depot
- Between floors of buildings
- Signage

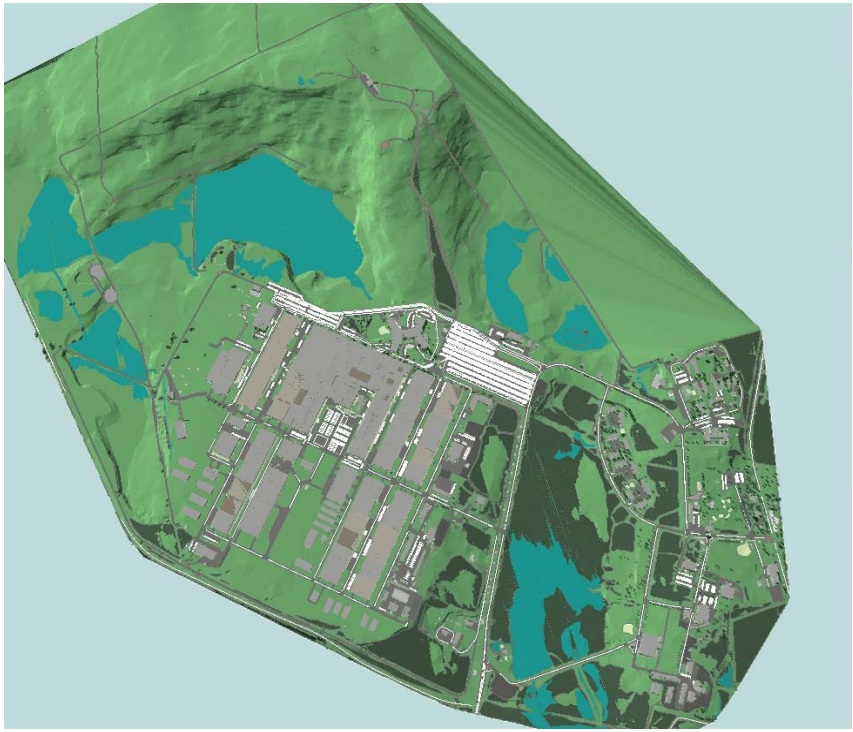
Flow

- Clockwise/Counterclockwise
- Main “traffic patterns”
- Entrance/exits
- Door swing

Distinct floor plans require different schemas

- Wings
- Corridor shape
- Rooms.

Exterior Areas to be Addressed



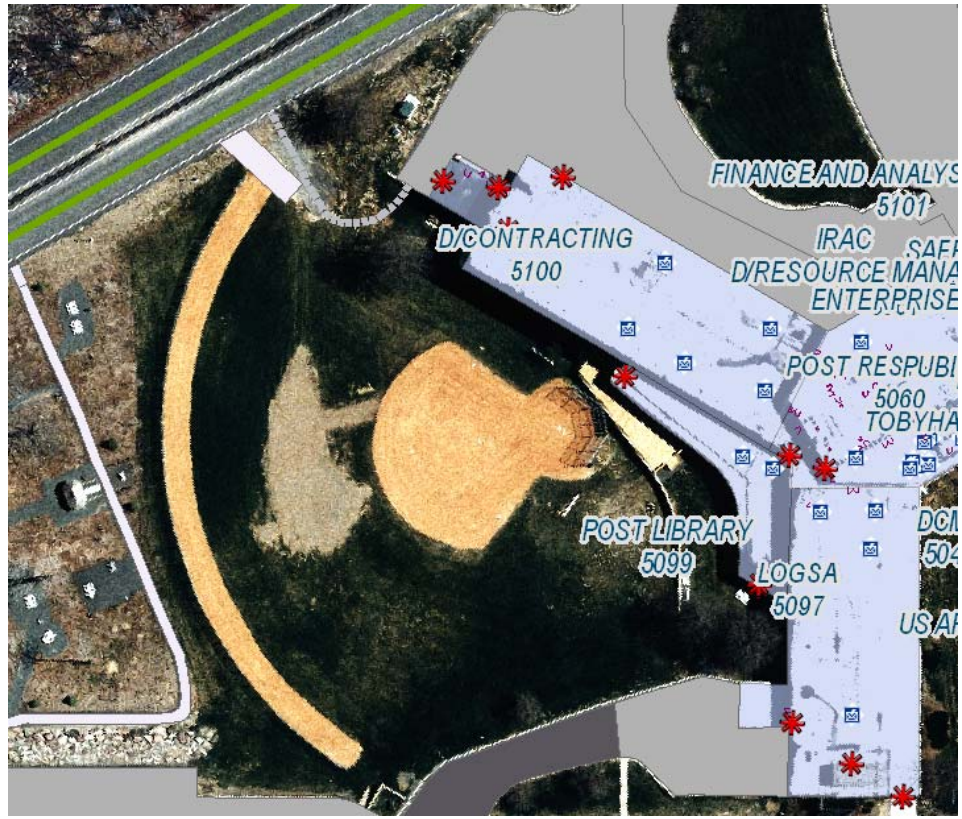
- Overhead and cargo doors
- Driveways
- Parking spaces
- Bus Stops
- Route numbers
- Mail stops.

Data Integration

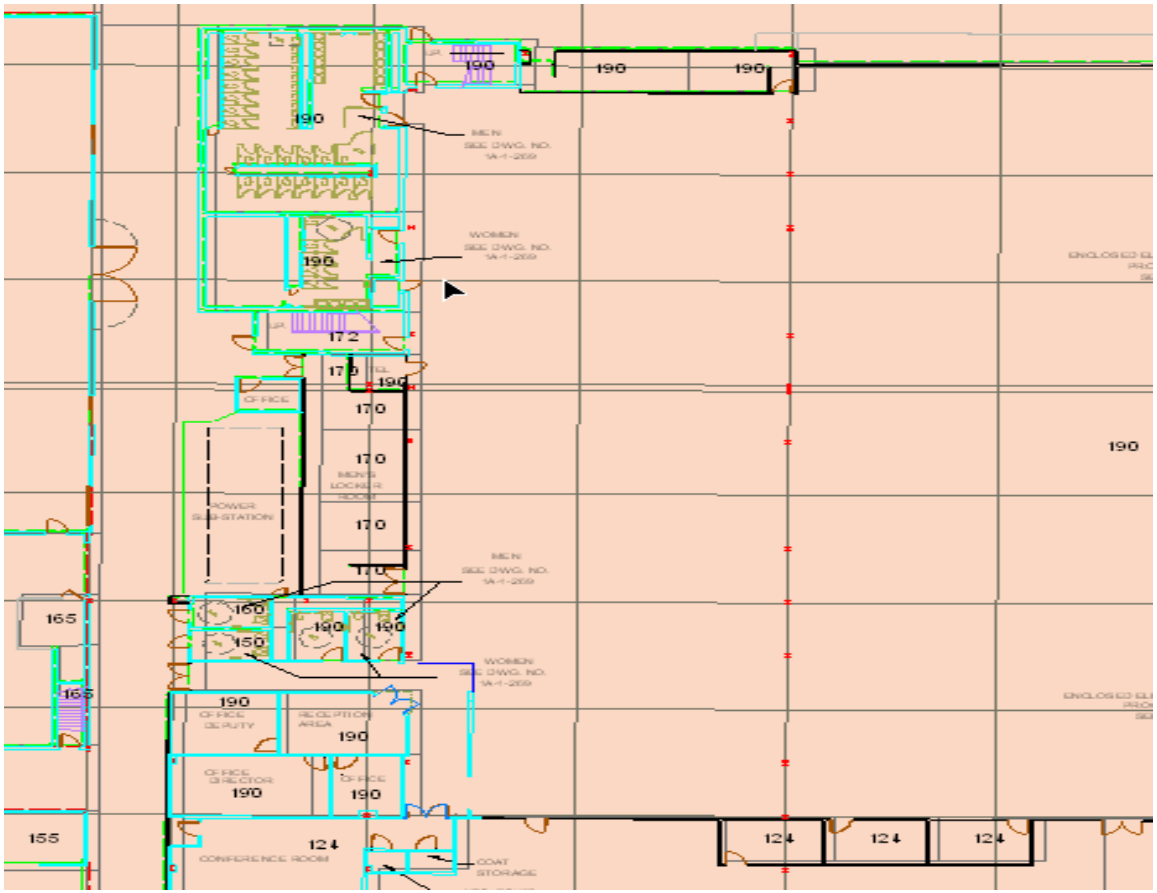
- Graphical Data sources:
  - CAD Files – Interior Layouts, Site Maps, Project Drawings/Plans/As-builts
  - Base Map From Flyover – CAD files in (originally) tiled layers
  - Environmental Coverages (asbestos project coverages)
- Non-graphical (tabular) Data sources:
  - Building Evaluation database
  - IFS (Integrated Facility System) Real Property Records
  - Asbestos testing and inspection data.

External Addressing Features

- Addressing will include:
  - Mail stops
  - Emergency exits
  - Room and suite numbers
  - Elevators and stair locations
  - Corridors and hallways
  - Fire extinguishers and sprinkler pits
  - Telephones
  - Substations and electrical rooms.



Publicize and Standardize



- Data will utilize both GIS and CAD sources
- Updates must be provided to Department of Public Works (DPW).

Future Use of Room Numbering and Addressing

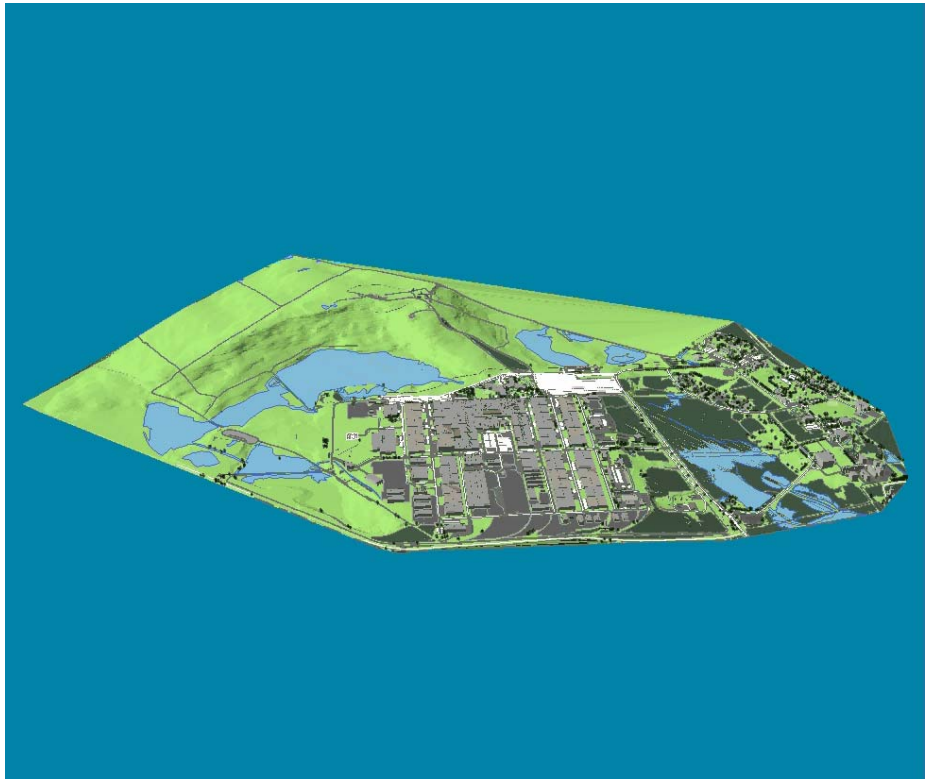
- Standardized numbering and addressing will enable the integration of business practice functionality in IFS and job order tracking
- Safety Applications – Enhanced 911 response, phone schematic, automatic alarm triggers to interior room numbers, emergency lights mapped and tracked
- Ease of personnel location – Room numbering and cost center areas.

Building Usability Throughout the Depot

- Standard Operating Procedures
- Plant Engineering Department (PED), Environmental Management Division (EMD), and Department of Public Works (DPW) coordination
- Specialized training
- Server-side applications for business processes.

Future of GIS at TYAD

- GIS visibility is growing
- Ease of use promoted throughout the installation
- Shared methodology and simplified Graphical User Interfaces (GUIs) for location purposes.



Increased Use of Several Extensions

- 3D Analyst
- Spatial Analyst
- Data Interoperability
- Survey Analyst

- Development Using ArcIMS™– ArcGIS™ Server.

Contact

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